Infrastructure and PPP in Canada and Developing Countries

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What are P3s?
What Are P3s?

Four key attributes:

1. A public good or service delivered in partnership with the private sector
2. Risk allocation consistent with party best able to manage it
3. Whole of lifecycle costing (design and maintenance obligations are bound together)
4. Private finance
Revenue risk vs. Availability

- Government backstopping the payments
- User pay models
  - All or part
- Project finance and bankability
  - No stranded risk
- Traffic risk
- Greenfield vs. brownfield
Canadian Infrastructure Experience
History of PPP in Canada

- First introduced in Canada in mid to late 90s, however, really gained momentum in 2004/2005
  - Currently we are seeing 10-15 deals procured each year
  - Entities actively procuring PPP solutions include:
    - British Columbia
    - Alberta
    - Manitoba
    - Ontario
    - Québec
    - New Brunswick
    - Federal
    - Various municipalities

- Broad cross-country support
Notable Recent Canadian Transactions
A total of ~ $50bn Canadian PPP Projects have been awarded to 2012

<table>
<thead>
<tr>
<th>Ontario (~$23bn)</th>
<th>British Columbia (~$10bn)</th>
<th>Quebec (~$7bn)</th>
<th>Alberta (~$5bn)</th>
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<tbody>
<tr>
<td>Air Rail Spur Link</td>
<td>Interior Health and Surgical Centre Project</td>
<td>CHU Ste-Justine</td>
<td>Alberta Schools I</td>
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<td>Billy Bishop TCA Tunnel</td>
<td>KGH Clinical Support Building</td>
<td>Lachine Rail Maintenance Facility</td>
<td>Alberta Schools II</td>
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<td>Highway 407 East - Phase 2</td>
<td>Evergreen Line</td>
<td>Centre Hospitalier de l’Université de Montreal (CHUM)</td>
<td>Alberta Schools III</td>
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<td>Ottawa LRT</td>
<td>Singe Room Occupancy Renewal Initiative</td>
<td>McGill University Health Centre (MUHC)</td>
<td>SE Stoney Trail</td>
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<td>Pan-Am Games Projects</td>
<td>South Fraser Perimeter Road</td>
<td>CHUM Research Centre</td>
<td>NE Stoney Trail</td>
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<td>Humber River Regional Hospital</td>
<td>Golden Ears Bridge</td>
<td>Autoroute 30</td>
<td>Confederation Bridge</td>
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<td>Halton Healthcare Services</td>
<td>Kelowna Vernon Hospital</td>
<td>Montreal Concert Hall</td>
<td>Surrey Memorial Hospital</td>
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<td>Windsor Essex Parkway</td>
<td>Sea to Sky Highway</td>
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<td>St. Joseph’s Healthcare Hamilton</td>
<td>Royal Jubilee Hospital</td>
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<td>Centre for Addiction and Mental Health (CAMH)</td>
<td>Fort St. John Hospital</td>
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<tr>
<td>Toronto South Detention Centre</td>
<td>Surrey Memorial Hospital</td>
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<td>Bridgepoint Hospital</td>
<td>Surrey Memorial Hospital</td>
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<td>Niagara Health System</td>
<td>Surrey Memorial Hospital</td>
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<td>North Bay Health Centre</td>
<td>Surrey Memorial Hospital</td>
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<td>Durham Courthouse</td>
<td>Surrey Memorial Hospital</td>
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<td>New Data Centre</td>
<td>Surrey Memorial Hospital</td>
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Manitoba (~$0.3bn)
- Disareli Bridge
- Chief Peguis Trail

Atlantic Canada (~$2.1bn)
- NB Route 1 Gateway
- NB Trans-Canada Highway
- FM Highway
- Highway 104
- Confederation Bridge

Canada (Federal $1.1bn)
- CSEC – LTAP (DND)
- RCMP Headquarters (Surrey)
## Current Canadian Pipeline

### Ontario
- East Rail Maintenance Facility
- McMaster Children's Health Centre
- Providence Care Hospital
- Public Health Laboratory at MaRS Centre
- Sheppard East Maintenance and Storage Facility
- Peel Memorial Centre for Integrated Health and Wellness
- The Region of Waterloo's Rapid Transit System
- ErinoakKids Centre
- Highway 407 East - Phase 2
- Joseph Brant Hospital
- Sheridan College
- St. Michael's Hospital
- Eglinton Crosstown LRT and Scarborough LRT Lines

### British Columbia
- BC Children's and BC Women's Redevelopment Project
- McLoughlin Wastewater Treatment Plant Project
- Emily Carr University Project
- John Hart Generating Station
- Kitsilano Secondary School
- North Island Hospitals Project
- Oak Bay High School Replacement Project
- Okanagan Correctional Centre
- Queen Charlotte/ Haida Gwaii Hospital Replacement Project
- Vernon Jubilee Hospital

### Quebec
- Aerotrain
- Hotel Dieu Hospital
- CHU Ste-Justine
- Quebec Detention Centres
- Turcot Interchange

### Saskatchewan
- Snow Storage and Decontamination Facility
- Regina Stadium
- Saskatchewan Data Centre
- Regina Water Treatment

### Alberta
- Edmonton LRT
  - Lac La Biche Water and Wastewater Treatment

### Municipalities
- Barrie Transit Project
- Calgary Recreation Centres
- Sudbury Waste Management
- Calgary Waste to Energy
- St. John Water

### Canada (Federal)
- Pont Champlain
- Ottawa Heating & Cooling
- La Mason de Radio Canada Development Project
- Detroit River International Crossing
- Energy Services Acquisition Program
Process Integrity in Canada

- Published project schedule
- Market consultation
- Clear RFQ and RFP process
- Project Agreement commentary
- Design and Specifications commentary
- Publicly available materials
Private Debt Funding Sources for Projects

- 2 competitive sources of long term and short term senior debt for Canadian projects
  - Bonds
    - Broadly marketed bonds to the Canadian bond market via private placement (short term and long term)
    - Narrowly distributed bonds to the life insurance companies via private placement (primarily long term and <$150-200 MM)
  - Bank debt
    - Canadian banks (primarily short term construction period financing)
    - Non-Canadian global PPP project finance banks (short term and mini perm financing)
Debt Funding Sources for Canadian Projects

- There is the possibility for various hybrid transactions between the sources, often being tranched based on the optimal mix of long term vs. short term senior debt requirements.
Canadian Public Infrastructure Bonds

- Canada’s PPP bond market is robust, in contrast to other jurisdictions such as Europe
- Original bid date underwriting commitment typically provided by one or more of the capital markets subsidiaries of the large Canadian Schedule I.
- Number of Buyers for PPP Bonds
  - Early issues averaged ~15 buyers
  - Most recent issues averaging ~35+ buyers
- Ratings have ranged from the BBB+ to A range, with the majority of transactions falling around A-
Value for Money: The Key Variable

- Equation differs between an availability model and a full concession model
- Are transferred risks worth the extra cost
- Conducted at 2 points:
  - Before selecting the model and after bids received
- Public Sector Comparator vs. Adjusted Shadow Bid or actual bids
When Infrastructure Programs Fail

- One-off forms can be risky for the public sector
- Insufficient long term capital
- Counterparty risk – government or agency rating and reliability
- Inefficient and lengthy process
  - Unclear or changing criteria
- Inadequate risk transfer
When Infrastructure Programs Fail

- Asset class challenges
- Overly ambitious programs
- Legal process issues
- Prior public failures
What Canada Has to Offer

- Significant deal experience and a well-honed risk allocation
- Model documentation
- Experienced investors, lenders, lawyers, advisors, developers and contractors
- Experience in a “policy start-up”
- The US is 10 years behind
- The UK has run out of steam
- Examples:
  - Israel, Sierra Leone and Peru
Infrastructure Program Requirements

I. Governmental Requirements

A. Legislative framework
B. Central agency leadership
C. Single procurement agency
D. Access to external expertise - technical, legal, financial
E. Transparent, credible process
F. Planning requirements
G. Stakeholder engagement
H. Smart Planning
I. Creditworthy Support
J. Value for Money
Assessing Enabling Legislation

- Criteria:
  - Market credibility
  - Clear lines of authority
  - Transparent decision-making
  - Adequate investment in institutions
  - Clear planning direction
  - Controls on spending authorizations
  - Procurement process rules
  - Clear regulatory powers
Infrastructure Program Requirements

II. Marketplace Requirements

A. Competitive marketplace

B. Lender knowledge and experience

C. Equity Players

D. Local Talent

E. Regulatory Certainty
Infrastructure Program Requirements

III. Process Requirements

A. Unsolicited Proposals
B. Procurement Process and Competition
C. Project or Concession Agreement Requirements
D. Design and specification review process
E. Financial commitment
F. Ensuring Operational Oversight
Lessons Learned for Developing Countries

1) A thorough needs analysis of infrastructure and basic services including all options.

2) A thorough feasibility study:
   1. Public vs. private sector provision on affordability, value for money and risk transfer
   2. Considers the rate of return on equity acceptable to both parties
   3. Accurate information
   4. Avoids unnecessarily high design specifications
   5. Considers all the financing options
   6. Involves all the necessary stakeholders
   7. Identifies the risks, allocates and devises risk mitigation strategies
   8. Requires treasury approvals at key stages
Lessons Learned for Developing Countries

3) Work out a multi-year budget framework to assess the affordability of projects for specific government institutions.

4) Address the issue of cost recovery and how infrastructure is to be financed.
Lessons Learned for Developing Countries

5) Encourage competition to drive innovation and bring down prices.
6) Build effective regulation
7) Provide political guarantees to investors where appropriate.
8) Develop capacity at the national, state/provincial and local levels.
Lessons Learned from Developing Countries

9) Ensure process integrity and legitimacy
10) Pre-empt public complaint and suspicion
11) Create flexible options for renegotiation and other challenges in a cost-effective way.
12) Tailor project to the individual communities to meet their specific needs and challenges.
13) Establish a process to channel unsolicited proposals into public competitive processes.
Challenges in Myanmar
Managing risk in Myanmar

- Getting in fast vs. 2015
- How patient is your capital?
- Picking the right dance partner
- Why non-US companies may have an edge
- Rule of Law:
  - Can it be financed?
  - The risks of accelerated change
  - Predictable, reliable dispute resolution?
- Political stability:
  - Will the current investment priorities remain?
  - Ethnic and local unrest
Putting the Good News in Context

- **Political Uncertainty:**
  - Transparency and corruption – a work in progress
  - Military control – holding the business reins
  - Military control – what happens in 2015?
  - Ethnic unrest
Putting the Good News in Context

- **Legal Uncertainty:**
  - Enhancing the rule of law
  - Land ownership rights, registration, zoning, etc.
  - Local law requirements
  - Government approvals required for legal rights
Putting the Good News in Context

- **Process Uncertainty:**
  - Untested approvals process
  - Testing the ease of doing business
  - Local content requirements
  - Next steps on the reform agenda
Putting the Good News in Context

- **Critical Infrastructure Instability:**
  - The challenge of logistics
  - An unreliable and small electrical system
  - Weak communications networks
  - Poor transportation corridors
  - Skilled Labour shortage
Putting the Good News in Context

- **Getting to Financial Stability:**
  - The ramp up of the IFI’s
  - Weak local credit
  - Foreign currency challenges
  - A reliable project finance regime
Sector Challenges in Developing Countries
Energy

- Difficult to attract investors for rural areas due to the low purchasing capacity of the local population
- Poor infrastructure leads to higher upfront capital costs for private investors
- Many private investors are wary of these high-cost investments in countries with unstable economies and politics
Water and Waste Water

- Difference between existing tariff levels and cost recovery levels can create political and implementation challenges
- Early clarity on expected scope of services is required: have delivery vs. neighborhood stand pipe
- 65 developing countries have tried water PPPs and 84% of awarded contracts are still active (2010)
- Concession, lease-affermages, management contracts or hybrid models have been successful depending upon:
  - Pre-existing tariff levels
  - Population concentration
  - Local expectations
  - Government support of capital investment
Natural Resources

- Volatility in the commodity market creates investor risk
- The history of excessive taxes and expropriation from governments is a concern for private investors
- High capital expenditure for a high risk business can create difficulty in attracting the right investor
- Poor infrastructure imposes high cost for accessing natural resource sites
Transportation

- Many transport projects, such as ports and toll roads, involve interaction with local communities. Public dissatisfaction with construction, labour opportunities from the project, fees for use of the service and disruption of their way of life can cause difficulties for PPP projects.

- Inherent exposure to the risk of market demand for the project upon completion creates uncertainty.

- Concession periods following infrastructure completion often cause disputes between the public, the government and private investors.
Agriculture

- Widespread mistrust between farmers and the public towards private investors in the biotechnology industry, particularly private sector seed companies, is a major challenge to agriculture PPP projects.

- Low productivity, poor farming infrastructure, high harvest losses and lack of market access can make it difficult to attract private investors.
Telecom

- Significant opportunity through “leapfrogging” technology.
- The importance of competition. Among the low-income African countries, those with more competitive markets have rates of mobile penetration that are 31 percent higher than those with uncompetitive markets.
- Legislative frameworks and a strong regulatory process are crucial but difficult for developing countries.
- Sharing the opportunity in a predominantly rural country: are incentives available to provide services in rural areas that are not otherwise commercially viable.
Infrastructure

- Myanmar will need $320 billion in infrastructure from now to 2030 – most in residential but also power, water treatment, road and rail – what are the funding sources?

- Massive residential infrastructure required for the coming urbanization.

- Ensuring local employment from foreign interest and investment
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